

Mecklenburg County Air Quality
PERMIT APPLICATION REVIEW SUMMARY
Title V

Section A: FACILITY INFORMATION		Existing	<input checked="" type="checkbox"/>	New	<input type="checkbox"/>
Company Name (Legal Corporate Name)	Transcontinental AC US LLC				
Site Name (If Different From Above)	Transcontinental Matthews				
Site Address (Street, City, Zip Code)	700 Crestdale Road, Matthews, NC 28105				
General Description of Business	Manufacturer of coated and laminated film products				
Facility AQ Classification(s)	TV	Site Consistent w/ Zoning? (Y/N)	Y		

Section B: APPLICATION INFORMATION		Modified	<input checked="" type="checkbox"/>	New	<input type="checkbox"/>
Date of Application	2/27/18	Application Tracking Number	2018-AQ-48866		
Date Complete Application Received	3/8/18	AQC Date/Public Comment Opens	Newspaper & website notice, 3/25/19 AQC		
Confidentiality Requested?	No	AQC Agenda Type: Notice, Alternate, FYI	Notice		
Application Results: Brief description of actions requested by application and/or taken by MCAQ.	1. Renewal of Title V Permit 2. Legal ownership change – site name changed from Coveris Advance Coatings US, LLC to Transcontinental Matthews 3. Expand alternative operating scenario (AOS#1), which applies to non-VOC coating, to all coaters 4. ESBRL1 burner replacement from 20.085 mmBtu/hr to 25.085 mmBtu/hr				
Permit Issued as a Result of Application – Number:	19-01V-001				
Permit Voided as a Result of Application – Number:	14-03V-001				

Section C: REGULATORY INFORMATION						
MCAPCO Regulations Applicable: List only <u>specific</u> conditions and/or regulations cited in permit issued. Indicate subpart for regulations 2.0524, 2.1110 & 2.1111.	1.5700/2.1100 Toxic Air Pollutant Procedures 2.0503/2.0515 Particulate Emission Standards 2.0516 SO ₂ from Combustion Sources 2.0524 NSPS for Coating Operations (Subparts FFF, SSS, and VVV) 2.0524 NSPS for Steam Generating Units (Subpart Dc) 2.0530 Prevention of Significant Deterioration (avoidance) 2.0531 Sources in Nonattainment Areas 2.0966 RACT for Paper, Film, and Foil Coatings 2.1111 Maximum Achievable Control Technology (Subparts DDDDD, EEEE, JJJJ, OOOO, EE, GGGG, ZZZZ)					
Miscellaneous Applicability (Y/N)	N	112r (40CFR68)	N	Strat. Ozone (40CFR82)	Y	CAM (40CFR64)
HAPs >10tpy, Potential Emissions: facility-wide	Dimethyl Formamide, Ethyl Benzene, Hydroquinone, Methanol, MIBK, Toluene					
TAPs Modeled: this application	None					

Section D: FACILITY- WIDE EMISSIONS INFORMATION					
AIR POLLUTANTS	Calculated Actual Emissions With Control (tons/year)				
	Existing	New	Total	# Change + / (-)	% Change + / (-)
Particulate Matter < 10 microns - PM-10	0.06	0	0.06	0	0
Sulfur Dioxide - SO ₂	0.06	0	0.06	0	0
Nitrogen Oxides - NO _x	9.59	0	9.59	0	0
Carbon Monoxide - CO	7.97	0	7.97	0	0
Volatile Organic Compounds - VOC	7.65	0	7.65	0	0
All Hazardous Air Pollutants - HAPs	1.29	0	1.29	0	0

AQ Specialist Signature: Evan Shaw Date Completed: 2/28/2019
 Supervisor Signature: Chuck Greco Date Approved: 2/28/2019

SECTION A DETAILS

FACILITY INFORMATION

Detailed discussion of any items in Section A. At a minimum provide the following information:

- 1. Basis for permit: reason facility/source is "major" under Title V and submitting a Title V application*
- 2. description of business operation (more detailed than summary page)*

Basis for Permit:

Transcontinental Matthews is a major source for VOC, total HAP, and six individual HAPs (Dimethyl Formamide, Ethyl Benzene, Hydroquinone, Methanol, MIBK, and Toluene). It has the potential to emit greater than 100 tons/year of volatile organic compounds, >25 tons/year of total hazardous air pollutants (HAPs), and >10 tons per year of the following six individual HAPs: Dimethyl Formamide, Ethyl Benzene, Hydroquinone, Methanol, MIBK, and Toluene.

The facility is major for PSD since VOC potential emissions are greater than 250 tpy.

The facility has equipment subject to multiple MACTs (Subparts JJJJ, OOOO, EE, EEEE, ZZZZ, DDDDD, GGGGG) and NSPS (3V, 3F, 3S) standards. The facility currently operates under:

- Title V Permit No. 14-03V-001

The sources have the following VOC limits:

- ES-132 has a PSD avoidance limit of 40 tons per year
- ES-131 has a nonattainment NSR avoidance limit of 21.9 tons/12 months and 5.0 lbs/hr
- ES-133 and ESWSH2 have a combined nonattainment NSR avoidance limit of 40 tons per 12-month period
- ES-130 has NSR LAER requirements of 16.5 lbs/hr maximum and 90% minimum control efficiency.

Business Operation:

The facility operates roll-type coaters; the coater units include various types of drying ovens, including direct-fired natural gas ovens, electric ovens and steam ovens. Several coaters include printing stations. The coaters are permitted to use organic solvents to dissolve materials in preparation for the coating process. It is the dissolved materials that remain on a substrate once the coating process is complete. The facility coats paper, film, and specialty substrates. Once a substrate has been coated, organic solvent is driven off the newly manufactured product by heat or other means. The organic solvent released either during the coating process or in the subsequent drying process is captured by permanent total enclosures (PTE) on each coater. Solvent laden air from the PTE is directed to a single regenerative thermal oxidizer (RTO) which has a demonstrated VOC destruction efficiency of 97.5% (testing conducted on 10/3/17 as part of the Title V permit application process, then retested voluntarily on 11/29/18 in order to lower the combustion temperature).

All significant coaters are subject to one or more MACT standards and RACT. Coaters with newer construction dates are also subject to NSPS standards.

Coater ES-133 already has the capability to operate on non-VOC/HAP/TAP MCAQ pre-approved coatings and to vent those coating emissions directly to atmosphere, bypassing the RTO. This mode of operation was approved in writing by MCAQ on March 19, 2013, only for aqueous coatings 6331 and 6312. Per the facility's request, with this application the other coating lines will be added to the alternative operating scenario (AOS #1) that has already been granted for ES0133, allowing the coaters to vent non-VOC/HAP/TAP MCAQ pre-approved coatings directly to atmosphere, as long as the facility follows all of the requirements provided by the permit provisions.

There is one insignificant coater at the facility, IS0134, from which emissions are neither captured nor controlled. This single stripe coater has potential VOC emission of less than 5 tons/yr. The facility also operates ancillary equipment at the facility such as boilers, generators, tanks, etc.

SECTION B DETAILS

APPLICATION INFORMATION

[List all emission sources⁷ (permitted and exempt) reviewed as a result of this application, their associated control devices and pollutants. Provide a detailed discussion of any other items in Section B at bottom under "Application Notes"]

EMISSION SOURCE ID	EMISSION SOURCE DESCRIPTION 1. Type, manufacturer, capacity 2. Control device with ID (if any)	POLLUTANT (s) EMITTED	MISCELLANEOUS NOTES	Previous Permit No. (If applicable)
ES0125	A roll-type coater (#125) having one (1) print station	VOC HAP		14-03V-001

	with a 62" maximum width and a maximum speed of 100 feet/minute with one (1) direct-fired drying oven having multiple zones using a total maximum of 1.5 million Btu/hr natural gas with all coating emissions captured by total permanent enclosure	TAP PM PM-10 SO2 NOx CO CO2e		
ES0127	A roll-type coater (#127) having one (1) print station with a 62" maximum width and a maximum speed of 100 feet/minute with one (1) direct-fired drying oven having multiple zones using a total maximum of 5.2 million Btu/hr natural gas with all coating emissions captured by total permanent enclosure.	VOC HAP TAP PM PM-10 SO2 NOx CO CO2e		14-03V-001
ES0128	A roll-type coater (#128) having two (2) print stations with a 62" maximum width and a maximum speed of 250 feet/minute with two (2) steam drying ovens and all coating emissions captured by total permanent enclosure.	VOC HAP TAP PM PM-10 SO2 NOx CO CO2e		14-03V-001
ES0130	A roll-type coater (#130) having one (1) print station with a 62" maximum width and a maximum speed of 100 feet/minute with one (1) direct-fired drying oven having multiple zones using a total of 4.0 million Btu/hr natural gas with all coating emissions captured by total permanent enclosure.	VOC HAP TAP PM PM-10 SO2 NOx CO CO2e		14-03V-001
ES0131	A roll-type coater (#131) having one (1) print station with a 31" maximum width and a maximum speed of 500 feet/minute with two (2) direct-fired drying ovens using a total of 3.2 million Btu/hr natural gas with all coating emissions captured by total permanent enclosure.	VOC HAP TAP PM PM-10 SO2 NOx CO CO2e		14-03V-001
ES0132	A roll-type coater (#132) having a 15.75" maximum width and a maximum speed of 250 feet/minute with electric drying oven and all operating emissions captured by total permanent enclosure.	VOC HAP TAP PM PM-10 SO2 NOx CO CO2e		14-03V-001
ES0133	A roll-type coater (#133)	VOC		14-03V-001

	having two (2) print stations with a 65" maximum width and a maximum speed of 300 feet/minute with one (1) direct-fired drying oven using a total maximum of 9.6 million Btu/hour natural gas with all coating emissions captured by total permanent enclosure	HAP TAP PM PM-10 SO2 NOx CO CO2e		
ESBLR1	One (1) Burnham 25.085 million Btu/hour boiler used to provide process steam/heat fueled by natural gas with distillate (#2) oil as a secondary or back-up fuel.	VOC HAP TAP PM PM-10 SO2 NOx CO CO2e	Burner increase in capacity from 20.085 mmBtu/hr to 25.085 mmBtu/hr	14-03V-001
ESBLR2	One (1) Superior 20.085 million Btu/hr boiler used to provide process steam/heat, fueled only by natural gas.	VOC HAP TAP PM PM-10 SO2 NOx CO CO2e		14-03V-001
EST8ME	One (1) 8000 gallon storage tank used to store methyl ethyl ketone	VOC TAP		14-03V-001
EST8TO	One (1) 8000 gallon storage tank used to store tetrahydrofuran (THF)	VOC	From toluene or acetone to tetrahydrofuran (THF)	14-03V-001
EST301	One (1) 30,000 gallon storage tank used to store #2 fuel oil	VOC		14-03V-001
EST302	One (1) 30,000 gallon storage tank used to store #2 fuel oil	VOC		14-03V-001
ES1000	One (1) soil and groundwater air sparging remediation process with VOC emissions controlled	VOC HAP TAP		14-03V-001
ESWSH1	One (1) make ready and wash area for cleaning production equipment	VOC HAP TAP		14-03V-001
ESWSH2	One (1) make ready wash area for cleaning production equipment	VOC HAP TAP		14-03V-001
ESMIX	Fugitive emissions from mixing equipment used to prepare coatings for coating machines	VOC HAP TAP		14-03V-001
IS0134	A single stripe coater (#134) having one (1) print station and one (1) electric drying oven.	VOC HAP TAP		14-03V-001
IS01	320 HP diesel powered fire pump and 13.8 kW diesel powered emergency generator	VOC HAP TAP PM PM-10		14-03V-001

		SO2 NOx CO CO2e		
IS02	Laboratory hoods in Research and Certification Labs	VOC HAP TAP		14-03V-001
IS03	Pumps related to storage tanks	VOC		14-03V-001
IS04	One (1) 1,000 gallon and two (2) 275- gallon storage tanks storing fuel oil for the fire pump and emergency generator (IS01)	VOC		14-03V-001
IS05	Paper trim collection system	PM PM-10		14-03V-001
IS06	Paint Booth	VOC HAP TAP		14-03V-001
IS07	Guillotine cutter	PM PM-10		14-03V-001
IS08	Charles Beck Machine Sheeter	PM PM-10		14-03V-001
IS10	Ten (10) web width corona treaters associated with coaters 125, 127, 128, 129, 131 (2), 132 (2), and 133 (2).	N/A		14-03V-001
IS13	One (1) Roland VS-540 Solvent Ink Printer	VOC HAP		14-03V-001
IS14	Three (3) product slitters	N/A		14-03V-001

Note: In accordance with MCAPCO 1.5508(x), regulated fugitive emissions (from any of the 27 categories) as defined in 40 CFR 70.2 or for HAP emission purposes, shall be included in the same manner as stack emissions. All regulated fugitive emission sources may be grouped and listed as one (1) emission source under Emission Source ID No.

APPLICATION NOTES

Application completeness timing details:

- The initial renewal application submittal (dated 2/27/18) was received by MCAQ on 2/28/18.
- On 3/8/18, the application processing fee was received by MCAQ.
- On 7/16/18, questions about HAP/TAP emissions were posed to the facility as a part of the application review.
- On 8/27/18, the facility responded that after a primary contact change, they had contracted another firm to review and make any needed adjustments to the renewal application.
- On 9/6/18, the facility formally requested that the renewal application review be put on hold in order to make sure all questions are being answered thoroughly and accurately.
- On 12/19/18, updates to the renewal application (dated 12/18/18) were received by MCAQ.
- There were 104 days between the facility's request to put the application on hold and receipt of the additional information required for the application. The 104 days will be added on to the time MCAQ has to review the renewal application. This extends the 270-day review window to require a draft permit for review to be completed by 3/17/19. The facility will have an application shield between the time that their permit expires on 2/28/19 and when the new permit is issued.

The following updates were made by the facility:

- Clarification of cleaning operations, mixing equipment, and make ready areas:
 - Fugitive emissions of VOC could be emitted from various transfers or cleaning of stationary equipment that is not able to be located to the make ready and wash areas. Those fugitive emissions have now been accounted for and are included with the ESWSH1 and ESMIX sources.

- Notification of replacement of the burner on Burnham ESBRL1:
 - The new burner increases the heat input capacity of the Burnham boiler from 20.085 mmBtu/hr to 25.085 mmBtu/hr. The boiler will operate on natural gas with No. 2 fuel oil as backup during natural gas curtailment periods only.
- Updated emission calculations and methodologies:
 - Increase in combustion potential emissions due to increase in boiler burner capacity.
 - Coating emissions based on maximum mix usage for each machine, taking into account operational line speed and width of the material being coated (this methodology cannot be used by MCAQ for potential uncontrolled emissions; see more details below).
 - To better estimate emissions from the make ready areas (ESWSH1 and ESWSH2), the mix rooms (ESMIX), and various cleaning operations not conducted within these rooms, facility assumed that 3% of those solvents used for cleaning were volatilized during the cleaning operations:
 - Approximately 90% of the purchased cleaning solvents were used in the coating process, so it was assumed that the remaining 10% was used for various cleaning purposes. Most of the equipment cleaning occurs within the coating enclosures which are vented to the thermal oxidizer. The facility estimated that 30% of those solvents not used in the coating process were evaporated and emitted to the atmosphere through building vents. Therefore, estimated emissions from these sources are 3% (30% x 10%) of the total MEK and toluene purchased annually.
- Addition of slitters to the insignificant activities list
- Legal ownership change from Coveris Holdings Corp. to Transcontinental AC US LLC. Site name changed from Coveris Advance Coatings US, LLC to Transcontinental Matthews.

Emission Calculations

Except for the increase in burner size of ESBRL1 (slight increase in potential emissions), the facility is making no changes that would result in increases in emissions with this application, actual or potential.

- Actual Emissions:
 - Section D will show no increase in actual emissions with this application. The only increase in potentials in this application comes from the slight boiler capacity increase, which results in no increase in actual emissions. Emission limits in the current permit will be maintained.
- Uncontrolled potential emissions:
 - MCAQ does not accept the uncontrolled potential emission calculation method included in the submittal. The facility based the uncontrolled PTE on worst-case historical data (actuals), which is not able to be used to calculate true potentials. The result of using this PTE method, is that the PTE values are not as conservative.
 - As such, the existing PTE listed in the EPIC database will be maintained, rather than using the uncontrolled PTE values provided by the facility in the submittal.
 - Even if MCAQ were to use the facility-submitted calculations, there would be no impact on the facility classification.
 - For more details, see Section D below.
- Toxics:
 - The facility is not making a modification as defined in the state toxics rule, and therefore, does not trigger a toxics review. The facility did include a toxics review in the application which showed that toluene, arsenic, beryllium, cadmium, chromic acid, MEK, and MIBK have potential emissions that exceed their respective TPERs. However, toluene and MEK have already been modeled, and all of the other TAPs that have not been modeled are emitted from sources subject to a MACT, allowing them to be exempt per MCAPCO 1.5702(a)(27)(B), which states that a permit to emit toxic air pollutants is not required if the source is an affected source under 40 CFR 63.
 - The facility was notified of the ability to remove carbon tetrachloride and toluene-2,4-diisocyanate from Appendix A, as there were no emissions reported for these pollutants in the application. However, facility personnel requested that they remain on the permit in case the facility wanted to begin using materials that contained these TAPs in the future.

The following requests were made by the facility in the renewal application (see MCAQ response below each item)

- Update applicability of the alternative operating scenario (AOS #1) from only ES0133 to all coaters.
 - Coater ES-133 already has approval to operate on non-VOC/HAP/TAP MCAQ pre-approved coatings and to vent those coating emissions directly to atmosphere, bypassing the RTO. This

mode of operation was approved in writing by MCAQ on March 19, 2013, only for aqueous coatings 6331 and 6312. With this review, AOS #1 will be expanded to allow the other coating lines in addition to ES0133 to vent to atmosphere when venting approved coatings. An applicability review completed by MCAQ in February 2013 for the ES0133 coating line is attached for reference.

- Clarify the permit condition that details performance testing frequencies for emission sources and control devices.
 - In the current permit, each of the MACT rules listed in the performance testing table show that an initial test and additional tests are required. Since none of the MACTS referenced in the condition require subsequent performance testing, the facility is requesting that the condition be clarified to require VOC testing every five years in conjunction with the TV permit renewal, and that testing for HAP emissions is not required. This language will be clarified in the permit by MCAQ.
- Update equipment description for EST8TO (8,000-gallon storage tank) from storage tank used to store either toluene or acetone to storage tank used to store tetrahydrofuran (THF).
 - THF is not a listed HAP or TAP, but is a VOC. No new requirements would apply to this tank due to the change in material stored.
- Cannot remove soil/groundwater remediation system ES1000 from the permit.
 - The facility requested to remove ES1000 and its associated requirements from the permit. The facility was given permission in a letter from DEQ dated 4/15/11 to temporarily shutdown the AS/SVE system. The unit has not been in operation since, but it is still on site at the facility. Since DEQ did not grant permission of a permanent shutdown of the remediation system and the unit is still on site and has not been removed, MCAQ determined that MACT 5G must remain in the permit at this time. This decision was communicated to Marty Stewart through an email on 1/11/19.

SECTION C DETAILS		
REGULATORY INFORMATION		
<i>(Identify the MCAPCO Regulations reviewed because of this application. At minimum, the regulations already listed should be reviewed and a reason given for applicability or non-applicability. If a Regulation has a standard, list the standard and indicate how the source is in compliance.)</i>		
MCAPCO REGULATION NUMBER/TITLE	EMISSION SOURCE ID No(s). SUBJECT	NOTES ON REGULATION (compliance demonstration, applicability, etc.)
1.5500 Title V Provisions	All	<p>The facility is Title V due to the potential to emit exceeding 100 tons/yr for VOC, 25 tpy for total HAP, and 10 tpy for the following individual HAPs: Dimethyl Formamide, Ethyl Benzene, Hydroquinone, Methanol, MIBK, and Toluene. VOC and HAP PTE include control by a federally enforceable control device (Smith RTO @ 95%) as allowed for in the Part 70 definition. Facility is a minor source for all other pollutants, including GHGs with potential emissions of approximately 58,000 tpy CO2 equivalents)</p> <p>Only sources that are subject to PSD for another pollutant are required to address GHGs under PSD review and Title V permitting.</p>
1.5700 Toxic Air Pollutant Procedures	All	<p>No toxics review triggered with this application.</p> <p>The following TAPs potential emissions exceed their respective TPERs: arsenic, beryllium, cadmium, chromic acid, MEK, MIBK. MEK and toluene were previously modeled.</p> <p>In accordance with the toxics exemption in 1.5702(a)(27)(B), affected sources subject to 40 CFR 63 (MACT) provisions are exempt from toxics. All of the TAPs are either emitted from MACT sources or have already been modeled.</p>

		No further toxics modeling is required at this time.
2.1110 NESHAP (40 CFR 61)	N/A	None of the emission sources at the facility emit any HAP that is regulated under a Part 61 NESHAP.
2.0530 Prevention of Significant Deterioration	None – avoidance condition for ES0132	The facility is classified as a major source for PSD purposes since VOC potential emissions exceed the 250 tpy PSD major source threshold. ES-132 has a previously permitted PSD avoidance condition requiring source emissions to be less than 40 tons per calendar year.
2.0544 Prevention of Significant Deterioration for Greenhouse Gases	N/A	Based on the June 23, 2014 U.S. Supreme Court ruling, GHG emissions alone cannot trigger a PSD review. Sources already subject to PSD for other pollutant(s) are required to review GHGs under PSD. (see above) The facility is a major PSD source for VOC. GHG emissions are currently below the 100,000 tpy PSD threshold.
2.2100 Risk Management Program (40 CFR 68)	N/A	The facility is not subject to 40 CFR 68 – “Prevention of Accidental Releases” – Section 112(r) as indicated on the A-1 form submitted in the application.
2.2600 Source Testing	CDSMITH	Source testing is required for the thermal oxidizer CDSMITH every 5 years as part of the Title V renewal application process. The retesting is not a requirement of any of the MACT or NSPS regulations that the facility sources are subject to, but it is used to verify the oxidizer operating parameter (combustion temperature) which is used to confirm compliance with the permit required destruction efficiency. The most recent stack test was conducted on 11/29/18 and demonstrated a control efficiency of 97.5% for CDSMITH with an average combustion temperature of 1504°F (testing conducted on 10/3/17 as part of the Title V permit application process then retested voluntarily on 11/29/18 in order to lower the combustion temperature). The current operating parameter is captured in Attachment 2 of the permit and is used in conjunction with information in the Monitoring table to identify and report excursions from permit limits.
40 CFR 82: Stratospheric Ozone Protection	N/A	No regulated compounds used in any permitted processes.
40 CFR 64 Compliance Assurance Monitoring	ES-0125 ES-0127 ES-0128 ES-0130 ES-0131 ES-0132 ES-0133	Coaters 125 - 133 meet CAM applicability requirements because they each are at a major source and: 1) have pre-control potential to emit > 100 tons VOC; 2) have a control device; and 3) are subject to an emission standard The facility has previously submitted a CAM Plan that describes the CPMS system for each coater and the monitoring approach taken. The document

		demonstrates that compliance with the permit requirements for Monitoring and the MACT/NSPS regulations will ensure compliance with CAM requirements. Title V Semiannual Monitoring Reports are used to document ongoing compliance with Part 64 requirements.
MCAPCO Regulation 2.0503 – Particulates from Fuel Burning Indirect Heat Exchangers	ESBLR1 ESBLR2	<p>This only applies to indirect heat exchangers, so the direct-fired natural gas, steam, and electric ovens on the coaters are excluded.</p> <p>The regulation requires each heat combustion source to comply with an allowable emission limit determined by the total facility heat input capacity. The total boiler heat input is 45.17 MMBtu/hr. Using the equation in the regulation, the allowable emission limit is $1.090(45.17)^{-0.2594}$, or <u>0.41 lb/MMBtu</u>. The worst-case PM emissions will occur when ESBLR1 is combusting fuel oil. The fuel oil combustion PM emission factor for #2 fuel oil is 2 lbs PM per 1,000 gallons #2 fuel oil (See AP-42 Table 1.3-1). If there are 140,000 BTU/gal then:</p> $2 \text{ lb PM}/1000 \text{ gal} \times 1 \text{ gal}/140,000 \text{ BTU} = 0.014 \text{ lbs PM}/\text{mmBtu}$ $0.014 \text{ lb PM}/\text{mmBtu} < 0.41 \text{ lb}/\text{mmBtu}$
MCAPCO Regulation 2.0515 – Particulates from Miscellaneous Industrial Processes	ES-0125 ES-0127 ES-0130 ES-0131 ES-0133	<p>Since the coaters with natural gas ovens have direct-fired ovens, they are subject to this regulation instead of 2.0503.</p> <p>The ovens are not subject to any other emission control standards, so each must comply with $E=4.10(P)^{0.67}$. ES-133 is the largest coater and has a maximum coating rate of 0.5 tons/hr and fuel usage rate of 0.2 tons/hr, for a total process rate of 0.7 tons/hr of material that may cause emission of PM. Therefore, the calculated allowable PM emission rate for the largest coater is 3.23 lbs/hr. The facility-wide PM emission rate presented in the application is 0.01 lbs PM/hr. All coaters should be compliant with the standard.</p>
MCAPCO Regulation 2.0516 – Sulfur Dioxide Emissions from Combustion Sources	ESBLR2 ES-0125 ES-0127 ES-0130 ES-0131 ES-0133 IS01	<p>This regulation does not apply to sources subject to an emission standard for sulfur dioxide, so the ESBLR1 is not subject, since it is subject to the NSPS Subpart Dc sulfur standard.</p> <p>All other combustion sources must each meet the standard of 2.3 lbs SO₂ per MMBtu input. The only fuels used in these sources are natural gas and diesel. The AP-42 emission factors for the combustion of these fuels are as follows:</p> <ul style="list-style-type: none"> Natural gas (boilers) - 0.6 lb SO₂/1,000,000 SCF and since 1,020 BTU/SCF, when you convert you get an emission factor of 5.9E-16 lb SO₂/mmBtu Diesel, low sulfur (generators) – 0.29 lbs SO₂/mmBtu (see AP-42 Table 3.3-1) <p>All are compliant with the MCAPCO standard.</p>
MCAPCO Regulation 2.0948 – VOC Emissions from Transfer Operations	N/A	Regulation applies to VOC transfer from a storage tank to tank trucks or tank cars. The facility does

		not load product to these vessel types, therefore the regulation does not apply.
MCAPCO Regulation 2.0949 – Storage of Miscellaneous VOCs	N/A	Regulation applies to storage of VOCs in tanks >50,000-gallon capacity. The facility does not store VOCs in tanks that size.
MCAPCO Regulation 2.0951 Miscellaneous VOC Emissions	N/A	This is not applicable since the facility is subject to MCAPCO 2.0966 in addition to 2.0958.
MCAPCO 2.0958 – Work Practices for Sources of VOCs	All coaters and coating prep equipment	This regulation requires facilities to follow specified work practices to reduce fugitive VOC emissions.
MCAPCO 2.2614 – Determination of VOC Emission Control System Efficiency	All coaters permanent total enclosures	This regulation provides criteria for determining capture efficiency from permanent total enclosures (coating enclosures are required to maintain a negative pressure in order to vent the air to the RTO).
MCAPCO Regulation 2.0966 – Paper, Film and Foil Coatings	ES-0125 ES-0127 ES-0128 ES-0130 ES-0131 ES-0132 ES-0133	<p>All of the affected sources have an uncontrolled potential to emit that exceeds 25 tpy, therefore the facility can demonstrate compliance solely with controls, as follows:</p> <p>(3) Any individual paper, film, and foil coating line with the potential to emit, prior to controls, at least 25 tons per year of volatile organic compounds from coatings shall apply control with overall volatile organic compounds efficiency of 90 percent rather than the emission limits established in Paragraph (d) of this Regulation...</p> <p>The thermal oxidizer is required to have at least 95% destruction efficiency under the 4J MACT and by permit condition. 97.5% was demonstrated in the stack test.</p> <p>IS134 avoids applicability via MCAPCO 2.0902(b), which states that the rules are only applicable to sources that emit ≥ 15 lbs VOC per day. The source's daily emission rates are reported to MCAQ on the monthly report and evaluated for compliance at that time. Emissions from IS134 are below that threshold.</p>
2.0524 New Source Performance Standards – 40 CFR 60 Subpart Dc for Small Industrial - Commercial – Institutional Steam Generating Units	ESBLR1 ESBLR2	<p>ESBLR1 burner capacity is now 25.085 mmBtu/hr, while ESBLR2 burner capacity remains 20.085 MMBtu/hr. Both are natural gas boilers. Boiler 1 can also operate on #2 fuel oil. As existing boilers between 10 and 100 MMBtu/hr capacity, they are both subject to NSPS Dc.</p> <p>ESBLR1 is subject to the sulfur standard when it combusts fuel oil and complies by using oil with less than or equal to 0.5% wt sulfur. Compliance with the sulfur standard is demonstrated through fuel oil supplier certification of the sulfur content. Semiannual reporting is required for ESBLR1 to include fuel oil supplier certification, if oil was combusted in the reporting period.</p> <p>Recordkeeping is required for both boilers. Facility should maintain records of the amount of each fuel combusted monthly.</p>
2.0524 New Source Performance Standards – 40 CFR 60 Subpart FFF for Flexible Vinyl and	ES-0131 ES-0132	Both coaters are rotogravure lines which can be used to print/coat flexible vinyl or urethane

Urethane Coating and Printing		<p>products AND were constructed after January 18, 1983, so are subject to the NSPS. ES-0133 is not subject since it was constructed in 1982 and relocation and change of ownership does not constitute a modification under the regulations (it was relocated to Matthews with the 09-01C-001 construction permit).</p> <p>COMPLIANCE: One of the compliance options is the reduction of VOC emissions to atmosphere by 85% from each affected facility (each line). These coaters are routed to the Smith RTO with 97.5% demonstrated destruction efficiency, so they each comply with the standard. Ongoing compliance is demonstrated by the continuous monitoring of oxidizer exhaust temperature, using three-hour averages.</p> <p>REPORTING: Semiannual reports must be submitted identifying any periods when the three-hour average incinerator temperature was more than 50°F below the average temperature measured in the performance test. Postmark must be within 30 days following the end of the second and fourth quarters (7/30 and 1/30). There is no specific requirement to submit a report when there are no deviations.</p>
2.0524 New Source Performance Standards – 40 CFR 60 Subpart SSS for Magnetic Tape Coating Facilities	ES-0131 ES-0132	<p>The regulation applies to equipment constructed after January 22, 1986 used to produce magnetic tape. ES-0133 is not subject because it will not produce magnetic tape. Although it is unclear per MCAQ records if and when the facility triggered the full applicability of this rule by using more than the requisite 38m³ of solvent, the application indicated these coaters were subject with compliance as follows.</p> <p>STANDARD: VOC emissions from new coating operations must be controlled to at least 93% per 60.712(a).</p> <p>COMPLIANCE: Alternative method in 60.713(b)(5) - demonstrate that a total enclosure is installed around the coating operation and vent to a 95% efficient VOC control device.</p> <p>MONITORING, RECORDKEEPING and PERFORMANCE TESTING: 4J and 40 MACT requirements for enclosure and oxidizer temperature satisfy NSPS SSS.</p> <p>REPORTING: Semiannual reports identifying monitoring deviations or a statement that there were none during the reporting period are required. A deviation is defined as a 3-hour period when the oxidizer combustion temperature is more than 50°F below the average temperature during the performance test or the PTE reading varies by 5% or more from the average value measured during the performance test. Postmarked within 30 days</p>

		of the end of the reporting period, which is not defined in the rule. The facility submits semiannual reports on the timetable of MACT and TV reporting.
2.0524 New Source Performance Standards – 40 CFR 60 Subpart VVV for Polymeric Coating of Supporting Substrates	ES-0131 ES-0132	<p>The facility complies with Subpart VVV by installing, operating, and maintaining a total enclosure around the operation and venting VOC emissions to a control device that is at least 95% efficient. Thermal oxidizer temperature and total enclosure pressure drop are monitored to ensure they are within the ranges set by the performance test and Subpart VVV.</p> <p>REPORTING: Quarterly reporting of deviations is required, with a semiannual statement of compliance due when there are no deviations. A deviation is defined as a 3-hour period when the oxidizer combustion temperature is more than 50°F below the average temperature during the performance test. Postmarked within 30 days of the end of the reporting period, which is not defined in the rule. The facility submits semiannual reports on the timetable of MACT and TV reporting.</p>
2.0524 New Source Performance Standards – 40 CFR 60 Subpart IIII for CI RICE	N/A	None of the sources at the facility are subject to this NSPS because the equipment was constructed prior to the applicability date.
2.1111 NESHAP - 40 CFR 63 – MACT Subpart 5D for Boilers and Process Heaters at major sources	ESBLR1 ESBLR2	<p>MCAQ received the facility's initial notification for ESBLR1&2 on May 14, 2013, indicating they were subject to the 5D major source MACT. Both boilers are units designed to burn gas 1 fuels since they burn natural gas (unit 2 has the capability to burn #2 fuel oil but the gas 1 definition allows this for periods of gas curtailment and 48 hours of maintenance, testing, etc.). Any gas curtailment must be beyond the control of the facility per the 5D definition of gas 1 boilers.</p> <p>COMPLIANCE: Initial annual tune up per 63.7540 and a one-time energy assessment to be completed by compliance date of January 31, 2016. Subsequent tune ups must occur no more than 13 months after the prior.</p> <p>RECORDKEEPING: Keep onsite an annual report with details of annual tune-up per 63.7540(a)(10)(vi).</p> <p>NOTIFICATION: Initial Notification was due 05/30/13 and was received on 05/14/13. Notification of Compliance Status is due the 60th day following the completion of all initial compliance demonstrations for all boilers [must include information on the tune-up and energy assessment per 63.7530(d)&(e)]. The facility submitted the MACT 5D Notification of Compliance Status on 3/31/2016. It contained all of the required information as specified in MACT 5D 63.7545(e)(1) and (8).</p>

		<p>Per 63.7530(f) if a boiler that operates on natural gas has to use a fuel other than a gas fuel listed in this part due to a natural gas curtailment, a notification of alternative fuel use must be submitted within 48 hours of the declaration of each period of natural gas curtailment or supply interruption</p> <p>REPORTING: The facility must submit an annual compliance report per 63.7550(c). First report was due on January 31, 2017. Subsequent reports cover the period January 1 – December 31 and are due January 31. 63.7550(h)(3) requires electronic reporting to EPA via CEDRI (access through CDX).</p> <p>RECORDKEEPING: If an alternative fuel is used during curtailment, keep total hours per year that alternative fuel is burned and total hours operated in curtailment/emergency. Keep records of date, time, occurrence and duration of each startup and shutdown, and records of type and amount of fuel used during each startup and shutdown [per 63.7555(h)-(j)].</p>
2.1111 NESHAP - 40 CFR 63- MACT Subpart EE for Magnetic Tape Manufacturing	ES-0125 ES-0127 ES-0128 ES-0130 ES-0131 ES-0132	<p>In the past, the facility has manufactured magnetic tape (e.g. camera film) and is therefore subject to this existing MACT. Based on the facility's compliance plan dated June 11, 2004, the facility specified that it would control HAP emissions by an overall control efficiency of > 97%. 2018 stack testing confirmed compliance with this requirement. The facility also designated pressure drop between inside and outside the coater enclosure as another monitoring parameter to ensure compliance during magnetic tape production (site specific monitoring plan). The facility established the following operating limitations: minimum pressure drop and minimum oxidizer combustion chamber temperature. The facility is required to record these parameters during magnetic tape coating events and report deviations to MCAQ. Both of these parameters are monitored and recorded for compliance with MACT 4O and 4J.</p>
2.1111 NESHAP - 40 CFR 63- MACT Subpart EEEE for Organic Liquids Distribution	EST8TO EST301 EST302	<p>The affected source is the collection of all activities and equipment used to distribute organic liquids into, out of, or within a facility. This includes containers for loading or unloading organic liquids, storage tanks, transfer racks, and transport vehicles.</p> <p>The facility was previously permitted to store and transfer the organic liquid toluene, which is a Table 1 listed organic liquid HAP. However, toluene is no longer stored or transferred, and the tank has been replaced with tetrahydrofuran (THF). THF, no. 2 fuel oil, and MEK (MEK tank has never been listed as subject to the rule, but the other three tanks have) are not defined as organic HAP liquids for the purposes of Subpart EEEE. While there are no longer Table 1 organic liquid HAPs being stored at the facility, Subpart EEEE will be kept in the</p>

		<p>permit as subject to these three tanks. If the facility were to reinstate an OHAP into the process, they will remain an existing source instead of a new source this way.</p> <p>The affected source is storage tanks, transfer racks and equipment leak components, transport vehicles, and containers containing organic liquids. Affected emission sources at the facility are classified as “existing” per 40 CFR 63.2338 (f). The compliance date was February 5, 2007.</p>
2.1111 NESHAP - 40 CFR 63- MACT Subpart GGGGG for Site Remediation	ES1000	<p>The facility meets the applicability requirements of §63.7881 since it operates a site remediation process co-located at a major facility subject to other MACT standards. The facility’s remediation system is used for the removal of toluene, naphthalene, and benzene from an area where a former underground storage tank was located. The system uses air sparging and soil vapor extraction technology and has operated since 1996. It is considered an existing source under the MACT. Compliance date under the MACT was October 9, 2006.</p> <p>Compliance Requirements: Requirements are dependent on HAP content of remediation material and quantity processed (i.e. excavated, extracted, pumped, or otherwise removed). The most stringent requirement includes the need to control remediation emissions from process vents. The facility already controls emissions from its remediation operations using the Smith thermal oxidizer.</p> <p>The facility is only subject to the recordkeeping requirements of the Subpart since it extracts less than 1 Mg (2204.6 lbs) annually. The facility must prepare and maintain written documentation supporting the HAP quantification methods.</p> <p>The facility was given permission in a letter from DEQ dated 4/15/11 to temporarily shutdown the AS/SVE system. The unit has not been in operation since, but it is still on site at the facility. Since DEQ did not grant permission of a permanent shutdown of the remediation system and the unit is still on site and has not been removed, MACT 5G will remain in the permit.</p>
2.1111 NESHAP - 40 CFR 63- MACT Subpart JJJJ for Paper and Other Web Coating	ES-0125 ES-0127 ES-0128 ES-0130 ES-0131 ES-0132 ES-0133	<p>The affected source is the collection of all subject coating lines at the facility. Compliance: All major sources of HAP operating a web coating line engaged in the coating of metallic foil, paper, or plastic film are subject to this MACT. Coaters at the facility are an existing affected source, and additional lines added (such as ES-133) are considered part of the existing source until the reconstruction threshold is reached in accordance with Subpart A definitions and EPA guidance.</p> <p>Oxidizer Combustion Temperature: The facility established a Smith oxidizer minimum</p>

		<p>operating limit of 1504 °F as a result of the 11/29/18 performance test. The facility is required to monitor combustion temperature continuously and average readings at 3-hr intervals (40 CFR 63.3350 (e)). Operating limits must be met at all times after being established (40 CFR 63.3321 (a)). Records of control device system operating parameters must be maintained on a monthly basis (40 CFR 63.3410 (a)).</p> <p>Differential Pressure: The facility has established differential pressure between the inside and outside of each coating enclosure as a capture system parameter. During performance testing on 03/20/2013 the facility demonstrated 100% PTE via Method 204. A ΔP value > 0.007 in. H₂O (or more negative than -0.007 in. H₂O) confirms 100% capture at the facility.</p> <p>Reporting: Semiannual compliance reports – All reports should cover a 6-month period and report deviations from oxidizer and enclosure operating limits. The facility previously requested that the semi-annual compliance reports be due April 30th and October 30th (same as Title V reporting) instead of July 31st or January 31st [40 CFR 63.4300]. Startup, shutdown, malfunction reports – reported as necessary per 40 CFR 63.3400 paragraph (c). In addition, deviations from the 0.04 kg OHAP/hg material applied limit must also be reported (when operating AOS #1), but since all materials must be pre-approved by MCAQ, this should not be an issue.</p>
<p>2.1111 NESHAP - 40 CFR 63- MACT Subpart OOOO for Printing, Coating, and Dyeing of Fabrics and Other Textiles</p>	<p>ES-0125 ES-0127 ES-0128 ES-0130 ES-0131 ES-0132 ES-0133</p>	<p>The affected source is the collection of all affected coating lines at the facility. The compliance standard is 97% reduction of HAP emissions, established by 2018 stack test demonstrating 97.5% VOC destruction by the Smith oxidizer. There are also work practice standards which are similar to MCAPCO 2.0958 requirements. The facility has established operating limits for thermal oxidizer combustion chamber temperature and coating enclosure differential pressure. Performance testing, monitoring and recordkeeping requirements are the same as those required by Subpart JJJJ.</p> <p>Reporting: Semiannual compliance reports, now due April 30 and October 30.</p> <p>The 40 MACT allows switching between compliance options on a line by line basis as needed (different from 4J approach), with appropriate notification provided in the Semiannual Report. The semiannual report must indicate which compliance option (RTO or AOS #1) is in use for all periods and contain information on deviations. Currently, all coating materials approved for AOS #1-use when it is vented to atmosphere contain zero</p>

		OHAP. Any new coating requires MCAQ approval before use.
2.1111 NESHAP - 40 CFR 63- MACT Subpart ZZZZ for Reciprocating Internal Combustion Engines	IS01	<p>The 320 hp diesel fire pump and the 13.8 kW diesel emergency generators are both existing emergency stationary RICEs under the regulation. The generators are subject only to work practice standards with a compliance date of May 3, 2013. Requirements include:</p> <ul style="list-style-type: none"> - Change oil and filter every 500 hours or annually, whichever comes first; - Inspect air cleaner every 1000 hours or annually, whichever comes first; - Inspect all hoses and belts every 500 hours or annually, whichever comes first; - Operate according to manufacturer's emission related operating instructions; - Install non-resettable hour meter; and - Minimize idle during startup. <p>Since the engines are existing compression ignition engines < 500 HP located at a major source, the facility is not required to submit a Notification of Compliance Status or any other reports.</p>

SECTION D DETAILS				
EMISSION INFORMATION				
CALCULATION METHOD CODES (List all that apply)		1= Stack test result 2= Material (mass) balance 3= EPA approved information (AP-42, CTG, etc.) 4= Other (specify in Table below)		
CALCULATION REJECTION CODES (List all that apply)		1= Calculation error 2= Wrong emission factor(s) used 3= Control efficiency(ies) not accepted 4= Other (Specify in Table below)		
EMISSION SOURCE ID NUMBER	CALCULATION METHOD CODE	ACCEPT OR REJECT?	CALCULATION REJECTION CODE	MCAQ CALCULATIONS ATTACHED?
All Coaters	1, 2, 4	R	4	No
Combustion Sources	3	A		No
Actual emissions from CY2017 submittal				

ACTUAL EMISSIONS: Actual emissions presented in Section D were taken from the EPIC database for CY2017.

POTENTIAL EMISSIONS: With this application, the facility proposed to use the maximum mix usage for each line to determine the maximum emission rate, taking into consideration the operational line speed, width of the material being coated, solids deposit per 3000ft², and solids content of the material. Essentially, the facility identified the worst-case VOC coating for each line and used actual data [amount of the worst coating used for the year (lbs) divided by duration of coating with that material (hrs)] to determine the maximum usage rate for that coating. This method does not meet the requirements for potential to emit calculations since none of the assumptions used are federally enforceable and potential to emit cannot be based on historical actual data.

SECTION E
SUPPORTING DOCUMENTATION
(Provide brief description of any ATTACHMENTS)

1. Application dated February 27, 2018
 2. Legal name change letter
 3. Application Updates dated December 18, 2018
 4. MCAQ February 2013 Applicability Review for ES-0133 Alternative Operating Scenario
- Email Correspondence:

5. Request to put application on hold
6. Updated potential uncontrolled and projected actual emissions
7. Remediation system to remain in permit
8. TAPs to remain in permit